Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

7/18/2012

Certified Mail

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Bradley Belden
The Belden Brick Company
P.O. Box 430
Sugarcreek, OH 44681-0430

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0679000118
Permit Number: P0109737
Permit Type: Initial Installation
County: Tuscarawas

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southeast District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-SEDO; Pennsylvania; West Virginia

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
The Belden Brick Company

Facility ID:	0679000118
Permit Number:	P0109737
Permit Type:	Initial Installation
Issued:	7/18/2012
Effective:	7/18/2012

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
The Belden Brick Company

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. F226, Plant 2 Additives Processing 14

Authorization

Facility ID:	0679000118
Facility Description:	The Belden Brick Company Plants 2, 3, 4, 6, 8, and 9.
Application Number(s):	A0044078
Permit Number:	P0109737
Permit Description:	Initial installation permit for new additives processing equipment to be installed inside the Plant #2 factory
Permit Type:	Initial Installation
Permit Fee:	$1,000.00
Issue Date:	7/18/2012
Effective Date:	7/18/2012

This document constitutes issuance to:

The Belden Brick Company
475 Dover Road
Sugarcreek, OH 44681-0430

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0109737
Permit Description: Initial installation permit for new additives processing equipment to be installed inside the Plant #2 factory

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**F226**
Company Equipment ID:	F226
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed.The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

C. Emissions Unit Terms and Conditions

1. F226, Plant 2 Additives Processing

Operations, Property and/or Equipment Description:

10 ton per hour additives processing operation fully enclosed within the Plant #2 factory building and controlled with a baghouse; includes one load-in hopper, one load-out hopper, one primary screen, one primary crusher, one surge hopper, one grinding mill (secondary crusher), one classifier (secondary screener), seven conventional conveyors, two pneumatic conveyors, two enclosed screw augers, two enclosed transfer chutes and three supersac bagging transfer points

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) c)(1) – (2), d)(3) – (6) and e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) from any stack serving this emissions unit shall not exceed 0.066 pound per hour and 0.289 tons per year. Emissions of particulate matter less than 10 microns (PM_{10}) from any stack serving this emissions unit shall not exceed 0.045 pound per hour and 0.197 tonsper year. Emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) from any stack serving this emissions unit shall not exceed 0.017 pound per hour and 0.074 ton per year. No visible PE from any stackserving this emissions unit. See b)(2)a. and c.-d. below
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.-d.below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)e. below.
d.	OAC rule 3745-17-11(B)	See b)(2)f. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(A)	See b)(2)g. below.
f.	OAC rule 3745-17-07(B)	See b)(2)h. below.
g.	OAC rule 3745-17-08(B)	See b)(2)i. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit to Install P0109737 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. Use of a fabric filter baghouse with a minimum of 95% capture efficiency for the crusher, screener and conveyor transfer points, 100% capture efficiency for the grinder and classifier, and a 99.9% control efficiency;

ii. Operate the process inside a building (permanent total enclosure) with a minimum of 100% capture efficiency; and

iii. PE from the stack shall not exceed 0.289 tons per year.

c. The emissions from this emissions unit, except for the load-in hoppers, shall be vented to a baghouse at all times the emissions unit is in operation.

d. The permanent total enclosure shall be constructed to totally enclose all equipment that comprises this emissions unit. The permanent total enclosure serving this emissions unit shall be maintained under negative pressure as required in this permit whenever the emissions unit is in operation.

e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM_{10} and $PM_{2.5}$ emissions from this air contaminant source since the uncontrolled potential to emit for PM_{10} and $PM_{2.5}$ is less than 10 tons/yr.

f. The uncontrolled mass rate of emissions (UMRE) for particulate from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II does not apply to this emissions unit.

g. Since the mass emissions limitation for particulates in OAC rule 3745-17-11 is not applicable, the opacity limits in OAC rule 3745-17-07 are also not applicable pursuant to OAC rule 3745-17-07(A)(3)(h).

h. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

i. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

(1) The permittee shall ensure that any raw material processed in this emissions unit does not contain more than 75% manganese.

(2) The permittee shall ensure that the stack of the baghousecontrolling this emissions unit has a minimum height of 39.75 feet.

(3) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than minus 0.007, whenever the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the permanent total enclosure when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

(2) The permittee shall collect and record the following information each day:

a. all three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential specified in this permit, as a three hour average; and

b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

(3) The permit-to-install (PTI) application for emissions unit F226 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV (ug/m^3)/10 x 8/24 x 5/7 = 4 TLV (ug/m^3)/(24 x 7) = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminant (emitted at 1 or more tons/year):

Toxic Contaminant: manganese

TLV (mg/m^3): 0.2

Maximum Hourly Emission Rate (lbs/hr): 0.050

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 3.752

MAGLC (ug/m^3): 4.76

The permitteehas demonstrated that emissions of manganese from emissions unit F226 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s)

modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify all three hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum required pressure differential.

(3) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s);

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

f) Testing Requirements

(1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:
PE from any stack serving this emissions unit shall not exceed 0.066 pound per hour and 0.289 ton per year.

Applicable Compliance Method:
Compliance with the emissions limitations shall be demonstrated by the following one-time calculations based on the emissions factors from AP-42 Tables 11.19.2-2 and 11.19-2-4 (8/04), the maximum throughput rates for the process and the capture and control efficiencies from the permittee's application:

PE (lb/hr) = [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X capture efficiency of baghouse X control efficiency of baghouse] + [[(maximum hourly throughput rate X classifying EF) + (maximum hourly throughput rate X grinding EF)] X capture efficiency of baghouse] + [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X % not captured by baghouse] + [(maximum hourly throughput rate X number of load-in points X load-in EF)]X capture efficiency of building]]

= [[(10 tons per hour X 0.0054 lb/ton) + (10 tons per hour X 0.30 lb/ton)] + (10 tons per hour X 11 X 0.003 lb/ton)] X 95% X (1-0.999)] + [[(10 tons per hour X 0.00225 lb/ton) + (10 tons per hour X 0.00404 lb/ton)] X 100%)] + [[(10 tons per hour X 0.0054 lb/ton) + (10 tons per hour X 0.30 lb/ton) + (10 tons per year X 11 X 0.003 lb/ton)] X 5%] + [(10 tons per hour X 3 X 0.0032)] x (1-1.00)]]

= [[(0.054 + 3.0 + 0.33) X 95% X (1-0.999)] + [(0.0225 + 0.0404) X 100%] + [[(0.054 + 3.0 + 0.33) X 5%] + 0.096] X (1-1.00)]]

= (0.0032 + 0.063 + 0)

= 0.066 lb/hr

Where:

Maximum hourly throughput rate = 10 tons per hour;
Number of conveyor transfer points = 11;
Uncontrolled crushing EF = 0.0054 lb PE/ton;
Uncontrolled screening EF = 0.30 lb PE/ton;
Uncontrolled conveyor transfer EF = 0.003 lb PE/ton;
Controlled classifying EF = 0.00225 lb PE/ton (at 99.9% control efficiency);
Controlled grinding EF = 0.00404 lb PE/ton (99.9% control efficiency);
Uncontrolled load-in EF = 0.0032 lb PE/ton;
Capture efficiency of the baghouse = 95% for the crusher, screener and conveyor transfer points and 100% for the grinder and classifier;
Capture efficiency of building = 100% (no fugitive emissions from load-in, crushing, screening and conveyor transfer points escape the permanent total enclosure); and
Control efficiency of baghouse = 99.9%.

If required, hourly particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

PE (tons/year) = lb/hour emission rate X 8,760 hours/year X 1 ton/2,000 lbs
= 0.066 X 8,760 X 1/2,000
= 0.289 tons per year

b. Emissions Limitations:
PM_{10} from any stack serving this emissions unit shall not exceed 0.045 pound per hour and 0.197 ton per year.

Applicable Compliance Method:
Compliance with the emissions limitations shall be demonstrated by the following one-time calculations based on the emissions factors from AP-42 Tables 11.19.2-2 and 11.19-2-4 (8/04), the maximum throughput rates for the process and the capture and control efficiencies from the permittee's application:

PM_{10} (lb/hr) = [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X capture efficiency of baghouse X control efficiency of baghouse] + [(maximum hourly throughput rate X classifying EF) + (maximum hourly throughput rate X grinding EF) X capture efficiency of pneumatic conveying] + [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X % not captured by baghouse] +

[(maximum hourly throughput rate X number of load-in points X load-in EF)] X 100% building capture efficiency]]

= [[(10 tons per hour X 0.0024 lb/ton) + (10 tons per hour X 0.072 lb/ton)] + (10 tons per hour X 11 X 0.0011 lb/ton)] X 95% X (1-0.999)] + [(10 tons per hour X 0.00104 lb/ton) + (10 tons per hour X 0.00339 lb/ton)] X 100%]] + [[(10 tons per hour X 0.00225 lb/ton) + (10 tons per hour X 0.00404 lb/ton)] X 100%)] + [[(10 tons per hour X 0.0024 lb/ton) + (10 tons per hour X 0.072lb/ton) + (10 tons per year X 11 X 0.0011lb/ton)] X 5%] + [(10 tons per hour X 3 X 0.0015)] x (1-1.00)]]

= [[(0.024 + 0.72 + 0.121) X 95% X (1-0.999)] + [(0.0104 + 0.0339) X 100%] + [[(0.024 + 0.72 + 0.121) X 5%] + 0.045] X (1-1.00)]]

= (0.00011 + 0.0443 + 0)

= 0.045 lb/hr

Where:

Maximum hourly throughput rate = 10 tons per hour;
Number of conveyor transfer points = 11;
Uncontrolled crushing EF = 0.0024 lb PM_{10}/ton;
Uncontrolled screening EF = 0.072 lb PM_{10}/ton;
Uncontrolled conveyor transfer EF = 0.0011 lb PM_{10}/ton;
Controlled classifying EF = 0.00104 lb PM_{10}/ton (at 99.9% control efficiency);
Controlled grinding EF = 0.00339 lb PM_{10}/ton (at 99.9% control efficiency);
Uncontrolled load-in EF = 0.0015 lb PM_{10}/ton;
Capture efficiency of the baghouse = 95% for the crusher, screener and conveyor transfer points and 100% for the grinder and classifier;
Capture efficiency of building = 100% (no fugitive emissions from load-in, crushing, screening and conveyor transfer points escape the permanent total enclosure); and
Control efficiency of baghouse = 99.9%.

If required, compliance with the pound per ton of feed/charge emission factors (on a per batch basis) for PM_{10}shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201 or 201A, as appropriate.

PM_{10} (tons/year) = lb/hour emission rate X 8,760 hours/year X 1 ton/2,000 lbs

= 0.045 X 8,760 X 1/2,000

= 0.197 tons per year

c. Emissions Limitations:
$PM_{2.5}$ from any stack serving this emissions unit shall not exceed 0.017 pound per hour and 0.074 ton per year.

Applicable Compliance Method:
Compliance with the emissions limitations shall be demonstrated by the following one-time calculations based on the emissions factors from AP-42 Tables 11.19.2-2 and 11.19-2-4 (8/04), the maximum throughput rates for the process and the capture and control efficiencies from the permittee's application:

$PM_{2.5}$ (lb/hr) = [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X capture efficiency of baghouse X control efficiency of baghouse] + [(maximum hourly throughput rate X classifying EF) + (maximum hourly throughput rate X grinding EF)] X capture efficiency of pneumatic conveying] + [[(maximum hourly throughput rate X crushing EF) + (maximum hourly throughput rate X screening EF) + (maximum hourly throughput rate X number of conveyor transfer points X conveyor transfer EF)] X % not captured by baghouse] + [(maximum hourly throughput rate X number of load-in points X load-in EF)] X 100% building capture efficiency]]

= [[(10 tons per hour X 0.0024 lb/ton) + (10 tons per hour X 0.072 lb/ton)] + (10 tons per hour X 11 X 0.0011 lb/ton)] X 95% X (1-0.999)] + [[(10 tons per hour X 0.00041 lb/ton) + (10 tons per hour X 0.00121 lb/ton)] X 100%)] + [[(10 tons per hour X 0.0024 lb/ton) + (10 tons per hour X 0.072 lb/ton) + (10 tons per year X 11 X 0.0011 lb/ton)] X 5%] + [(10 tons per hour X 3 X 0.0002)] x (1-1.00)]]

= [[(0.024 + 0.72 + 0.121) X 95% X (1-0.999)] + [(0.0041 + 0.0121) X 100%] + [[(0.024 + 0.72 + 0.121) X 5%] + 0.045] X (1-1.00)]]

= (0.00082 + 0.0162 + 0)

= 0.017 lb/hr

Where:

Maximum hourly throughput rate = 10 tons per hour;
Number of conveyor transfer points = 11;
Uncontrolled crushing EF = 0.0024 lb $PM_{2.5}$/ton;
Uncontrolled screening EF = 0.072 lb $PM_{2.5}$/ton;
Uncontrolled conveyor transfer EF = 0.0011 lb PM_{10}/ton;
Controlled classifying EF = 0.00041 lb $PM_{2.5}$/ton (at 99.9% control efficiency);
Controlled grinding EF = 0.00121 lb $PM_{2.5}$/ton (at 99.9% control efficiency);
Uncontrolled load-in EF = 0.0002 lb $PM_{2.5}$/ton;
Capture efficiency of the baghouse = 95% for the crusher, screener and conveyor transfer points and 100% for the grinder and classifier;
Capture efficiency of building = 100% (no fugitive emissions from load-in, crushing, screening and conveyor transfer points escape the permanent total enclosure); and
Control efficiency of baghouse = 99.9%.

If required, compliance with the pound per ton of feed/charge emission factors (on a per batch basis) for PM_{10}shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" and 40 CFR Part 51, Appendix M, Method 201A.

$PM_{2.5}$ (tons/year) = lb/hour emission rate X 8,760 hours/year X 1 ton/2,000 lbs
= 0.017 X 8,760 X 1/2,000
= 0.074 tons per year

d. Emissions Limitation:
No visible PE from any stack serving this emissions unit.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to U.S. EPA Method 22.

e. Emissions Limitation:
The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than minus 0.007, whenever the emissions unit is in operation.

Applicable Compliance Method:
If required, compliance with the permanent total enclosure requirements shall be determined according to U.S. EPA Method 204.

g) Miscellaneous Requirements

(1) None.